

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference P802442/WO/01	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. PCT/EP2004/009380	International filing date ( <i>day/month/year</i> ) 21 August 2004 (21.08.2004)	Priority date ( <i>day/month/year</i> ) 11 September 2003 (11.09.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant DAIMLERCHRYSLER AG			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 8 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input checked="" type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 03 July 2006 (03.07.2006)</p> <p>Authorized officer  <div style="text-align: center; font-weight: bold;">Yolaine Cussac</div></p> <p>e-mail: pt11@wipo.int</p>
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# PATENT COOPERATION TREATY

Translation

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **See form PCT/ISA/210**

Applicant's or agent's file reference

**P802442/WO/01**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/EP2004/009380**

International filing date (day/month/year)

**21.08.2004**

Priority date (day/month/year)

**11.09.2003**

International Patent Classification (IPC) or both national classification and IPC

**B60R16/02, H02J7/14**

Applicant

**DAIMLERCHRYSLER AG**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

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Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language  
\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. II

Priority

1. ☒ The following document has not yet been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date in the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>2-9</u>	YES
	Claims	<u>1</u>	NO
Inventive step (IS)	Claims	<u>2-9</u>	YES
	Claims	<u>1</u>	NO
Industrial applicability (IA)	Claims	<u>1-9</u>	YES
	Claims	<u></u>	NO

2. Citations and explanations:

1. This opinion makes reference to the following documents:

D1: EP 1 293 388 A (AUDI NSU AUTO UNION AG) 19 March 2003 (2003-03-19)

D2: EP 0 992 400 A (VOLKSWAGENWERK AG) 12 April 2000 (2000-04-12)

D3: EP 0 997 340 A (ABB RESEARCH LTD) 3 May 2000 (2000-05-03)

D4: WEST M J ET AL: "Predictive control for energy management in allimore electric vehicles with multiple energy storage units" CONFERENCE PROCEEDINGS ARTICLE, vol. 1, 1 June 2003 (2003-06-01), pages 222-228, XP010644429

2. Document D1 is considered to be the closest prior art. It discloses (the references between parentheses relate to this document):

A method for energy management, in particular for energy management of the on-board electrical system of a vehicle with a generator, at least one energy store and loads which can be divided into a plurality of classes,

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

comprising the steps of  
identifying the state of the generator and energy  
store or stores (page 2, line 32, algorithm),  
determining the amount of energy available in a  
subsequent time interval from the identified state  
data relating to the generator and energy store or  
stores (page 2, lines 37, 38, "... power or overload  
is predicted ..."),  
receiving switch-on requests from loads for the  
subsequent time interval (page 2, lines 40 to 42,  
"... at the times ... at which a load wants to  
switch on ..."),  
identifying the amount of energy required in the  
subsequent time interval on the basis of switch-on  
requests (page 2, lines 37 to 43),  
checking whether the amount of energy required is  
greater than the amount of energy available (page 2,  
line 42, "... whether a switch-on process is  
critical ..."),  
meeting all of the switch-on requests of the loads  
in the subsequent time interval when enough energy  
is available, or, when enough energy is not  
available, selecting a load or loads which is/are to  
be switched on in the subsequent time interval in  
accordance with the amount of energy available and a  
priority and a tolerance time of the corresponding  
loads (page 2, lines 44 to 47, "... priority ..."  
and page 3, lines 47 to 56, "... to a delayed  
increase ...").

The "delayed increase" disclosed in D1 is  
interpreted here as a tolerance time as per the

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INTERNATIONAL SEARCHING AUTHORITY

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

wording of claim 1.

2.1 All of the features of claim 1 are therefore already known from the disclosure of D1. The subject matter of claim 1 therefore does not meet the requirements of PCT Article 33(1) and (2).

2.2 The combination of features contained in dependent claim 2 is neither known from the available prior art nor suggested by it.

2.3 Claims 3-9 are dependent on claim 2 and therefore, in as much as they are dependent on claim 2, likewise meet the PCT requirements for novelty and inventive step.

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Clarity PCT Article 6

1.1 The application does not meet the requirements of PCT Article 6 because claim 1 is not clear. Claim 1 claims two alternatives on account of the "or" before the last method step. However, the paragraph bridging pages 2 and 3 of the description states that the last method step of claim 1 is an essential part of the invention. This results in an inconsistency between the description and the wording of the claims. The subject matter of claim 1 is therefore not clear within the meaning of PCT Article 6.

1.2 The term "class II" used in claim 4 does not have a generally recognized meaning and leaves the reader uncertain as to the meaning of the technical feature in question. As a result, the subject matter of said claim/claims is not clearly defined (PCT Article 6).